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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,609	04/12/2006	Heikki Mikonaho	AWEK 3458	1637
7812 7590 06/12/2009 SMITH-HILL AND BEDELL, P.C. 16100 NW CORNELL ROAD, SUITE 220 BEAVERTON, OR 97006				
EXAMINER NGUYEN, XUAN LAN T				
ART UNIT 3657		PAPER NUMBER		
MAIL DATE 06/12/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/575,609

**Applicant(s)**

MIKONAHQ, HEIKKI

**Examiner**

Lan Nguyen

**Art Unit**

3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 27 October 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-30 is/are pending in the application.  
4a) Of the above claim(s) 28-30 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 19-27 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Individual Patent Application  
6) ☒ Other: approved spec.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claims 28-30 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the piston engine and the damper are a combination and a sub-combination inventions. The damper can be used in environments other than a piston engine.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 28-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19, 20 and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann (3173514) in view of Ledbetter et al. (6443273).

Re: claim 19, Tiedemann shows a vibration damper in figure 4, as in the present invention, comprising: a body part 12 via which the damper can be fastened to an object

11 to be dampened, the body part defining an interior space, a guide shaft 14 disposed in the interior space of the body part, an oscillating piece 16 wherein the oscillating piece being disposed in the interior space of the body part, whereby the oscillating piece divides the interior space of the body part into two regions, at opposite sides respectively of the oscillating piece, and the oscillating piece being movable relative to the body part, movement of the oscillating piece being guided by the guide shaft, and wherein the guide shaft comprises a wall defining an interior space of the guide shaft, and the wall of the guide shaft is formed with openings 20, 20 for forming a flow connection between the interior space of the guide shaft and the two regions of the interior space of the body part as shown in figure 4. Tiedemann lacks a spring and the multi-pieces for the oscillating piece. Ledbetter teaches a vibration damper with an oscillating piece 20,22 comprises multi-pieces fastened together wherein the oscillating piece is supported by springs 32 in the damper of Ledbetter. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tiedemann's damper to comprise the oscillating piece with multi-pieces fastened together wherein the oscillating piece is supported by springs as taught by Ledbetter in order to provide the adjustability in the damper and to expand the capability of the dampers with the use of the springs as taught by Ledbetter.

Re: claims 20 and 22, Ledbetter shows the oscillating piece comprises two end pieces and a number of intermediate pieces 22 between the two end pieces wherein the intermediate pieces comprise adjusting discs and support sleeves 20.

Re: claims 23 and 24, Tiedemann's damper is in a cylindrical form with the shapes of the body part, the central axis, the guide shaft and the through hole as claimed.

Re: claims 25 and 26, as modified, Tiedemann's damper would comprise first and second axially aligned coil springs, disposed in the two regions respectively of the interior space of the body part, supporting the oscillating piece relative to the first and second end walls.

Re: claim 27, Tiedemann shows an adjuster 50.

4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann (3173514) in view of Ledbetter et al. (6443273) and further in view of Osterberg et al. (5816373).

Tiedemann's damper, as modified and rejected above, lacks bearing means at the end pieces. Osterberg teaches a damper with an oscillating piece 110 wherein the oscillating piece comprises bearings 170 at both ends of the oscillating piece. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Tiedemann to comprise bearings being placed at both ends of the oscillating piece as taught by Osterberg in order to improve the sliding action of the oscillating piece and reduce heat generation from friction.

### ***Response to Arguments***

5. Applicant's arguments filed 2/26/09 have been fully considered but they are not persuasive.

- Applicant argues that the combination of Tiedemann in view of Ledbetter is improper in that the operating principles of the two dampers are incompatible. Applicant further argues that Tiedemann's damper is non-adjustable that one of ordinary skill would not be motivated to modify as taught by Ledbetter. The Examiner disagrees. It is maintained that the combination is proper and that the combination produces an expected result. Adjustability is a known concept and is widely considered to be an improvement over a non-adjustability. It is progress to modify Tiedemann's damper so that it would be adjustable in order to meet different requirements for different dampening applications. Ledbetter teaches the adjustability by having multiple discs. To combine the two teaching to produce a damper with an adjustability is predictable and is obvious to one of ordinary skill in the art.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xuan Lan Nguyen/  
Primary Examiner  
Art Unit 3657

